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10/759,651	01/16/2004	Jaap De Baan	33474-00007USPT	8049
64004 7590 06/22/2007 STRASBURGER & PRICE, LLP 901 MAIN STREET SUITE 4400 DALLAS, TX 75202			EXAMINER SOTELO, JESUS D	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**MAILED**

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**GROUP 3600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/759,651  
Filing Date: January 16, 2004  
Appellant(s): BAAN ET AL.

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Alan R. Thiele  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 2/06/2007 appealing from the Office action mailed 8/10/2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

It is noted that on page 5, line 4, "steal" apparently should be --steel--.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,431,589	Corona	7-1995
4,501,525	Grundy et al	2-1985

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Corona (5,431,589).

Corona discloses a catenary anchor leg mooring system including a hollow buoy 16 including a cylindrical hull portion having a center of gravity which is below the sea surface; ballast compartments 90 having a portion below the sea surface; and means 50 providing a path for oil to travel from subsea reservoirs. The buoy 16 is adapted to float in a non-submersible condition.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corona in view of Grundy et al (4,501,525).

Corona does not disclose the type of ballast used in his chamber at 90. The use of sea water is well known to be used as a ballasting element. Corona actually suggest the use of variable buoyancy compartments and teaches the use of seawater for varying the ballast in the compartments. Grundy discloses a mooring buoy similar to that of Corona, and teaches forming the same with a configuration having a diameter which is greater than twice its height. In view of these disclosures, it would have been obvious to one skilled in the art at the time of the invention to make the buoy of Corona with a configuration having a diameter twice as large as the height of the buoy generally as taught by Grundy. To use seawater as the ballast component 90 in Corona would have been an obvious matter of design choice to one skilled in the art at the time of the invention. One of the functions of the ballast 90 in Corona is to stabilize the buoy. It should be noted that the recitation that the ballast compartment is constructed and arranged to “adjust the natural pitch and roll periods of said hollow buoy assembly” is merely a statement of desired functional result. The ballast tank disclosed in Corona will adjust the natural pitch and roll of the buoy as a natural consequence of its location.

#### **(10) Response to Argument**

Appellant argues that “The position of the applicant is that the Corona '589 reference which forms the basis of the rejection under 35 USC 102 neither teaches nor anticipates a continuously floating buoy which is constructed to minimize natural pitch and roll periods while the buoy is floating on the sea surface. Rather, it is the position of the appellant that the Corona '589

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reference teaches a buoy which simply avoids the problem of dealing with wind and wave forces by going underwater.

Accordingly, the appellant believes that the interpretation of the teachings of the Corona '589 reference by the U.S. Patent and Trademark Office is in error.”

The examiner disagrees with Appellant’s conclusion. Corona clearly discloses a floating catenary anchor leg mooring system used in the production of oil from subsea reservoirs.

Corona discloses a hollow buoy assembly which, if desired can be arranged for continuous flotation on the sea surface. The term “non-submersible” in line 3 of claim 1, merely states a desired form of operation of the buoy. The buoy in claim 1 is hollow and it is very clear that if the buoy was accidentally punctured it would be flooded and would, in fact, become submerged. On the other hand, the buoy of Corona is hollow, as in claim 1, and if desired, the buoy could be maintained in continuous flotation and, in effect, would be “non-submersible”.

The buoy of Corona includes a cylindrical hull portion 26. The location of ballast elements 90 at the bottom of the hollow compartment and below the sea surface clearly creates a center of gravity that would be located below the sea surface. Further, the location of the ballast compartment at the bottom of the hollow compartment physically adjusts the natural pitch and roll periods of the buoy. Clearly, the buoy includes means for providing a path for oil to travel from the subsea reservoirs to a tanker.

The fact that Corona suggests a method of operation wherein the buoy can be submerged during bad weather conditions does not take away the features above discussed.

Even though Appellant’s discussion of the operation of the system in Corona on pages 7 and the first paragraph of page 8 is accurate, this does not take away from the structural elements

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disclosed by Corona. It is noted that the claims are apparatus claims, not method claims. As such, and as noted above, Corona discloses all the elements recited in claim 1.

Appellant reiterates on page 8, that the limitations “non-submersible” and designed “for continuous flotation” on the sea surface are not described by Corona. These limitation, however, do not overcome the structural elements disclosed by Corona. The features of the buoy being “non-submersible” and “for continuous flotation” are deemed to be elements of intended use and the buoy of Corona can be used in a “non-submersible, continuously floating” condition, if desired.

Regarding claims 2, 4, and 5, Appellant argues that “there must be some logical reason apparent from positive, concrete evidence of record that justifies a combination of primary and secondary references”. In this case Corona discloses the apparatus of claim 1, as noted above.

Claim 2 merely adds that the ballast compartment is constructed and arranged to be filled with sea water. In Corona the ballast compartment is filled with elements 90, which appear to be solid. The use of seawater as a ballast is well known in the art. Corona teaches that in his buoy some ballast compartments could be flooded (obviously with seawater), column 4, line 30-32.

Thus, to use seawater as the ballast in the buoy of Corona would have been an obvious matter of design choice to one having ordinary skill in the art at the time of the invention.

Claim 4 adds the limitation that the cylindrical hull portion has a diameter which is greater than two times its height. This is considered a matter of design choice to one of ordinary skill in the art. Grundy discloses a similar buoy that is used for a similar purpose. Grundy teaches a configuration wherein the cylindrical portion of the buoy has a diameter which is greater than two times its height (figure 3). To merely shape the buoy of Corona with a configuration

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generally similar to that of Grundy would have been an obvious matter of design choice to one of ordinary skill in the art.

The limitations of claim 5 are inclusive in the teachings of Corona.

**(11) Related Proceeding(s) Appendix**

Appellant did not list any related proceedings, so it is assumed there are none.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

*Jesús D. Sotelo*  
*Jesús D. Sotelo*

**Primary Examiner**

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KNX 03D85 ☺

Conferees:

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*[Signature]*